CLAIMS modifications/changes:

Applicant requests that all claims of record be cancelled and new claims 25 to 32 be substituted as follows:

Claims 1-24: (Cancelled)

25. (new) A method for monitoring and controlling, from a host computer, the real-time logic state of a plurality of target devices in a boundary scan chain, comprising:

(a) displaying graphical representations of said target devices on a graphical display device connected to said host computer,

(b) running boundary scan operations on said target devices to collect information about said target devices and storing said information in said host computer for said displaying operation,

(c) updating said graphical representations with said information to visually indicate current real-time logic state of said target devices,

(d) initiating and running boundary scan operations via a method that frees the user from generating, preparing, or otherwise creating test vectors,

(e) initiating and running boundary scan operations via a method that frees the user from supplying test executives,

whereby a human can view and manipulate a boundary scan enabled device via a graphical user interface.

26. (new) The method of claim 25 further comprising modifying the attributes of said graphical representations to help organize and simplify monitoring of said boundary scan chain.

27. (new) The method of claim 25, further comprising providing a plurality of virtual indicators to augment and simplify the display of boundary scan information.

28. (new) The method of claim 27 wherein said indicators are graphical representations of light emitting diodes.

29. (new) The method of claim 25, further comprising providing a plurality of virtual controls to augment and simplify the control of data in a boundary scan chain.

30. (new) The method of claim 29 wherein said indicators appear as graphical representations of mechanical switches.

31. (new) The method of claim 25, further comprising providing a graphical representation of an input-output port on said host computer used to perform boundary scan operations, whereby said input-output port graphical representation serves to visually remind the user which port is controlling the scan chain.

32. (new) A method for creating graphical representations of target devices from user-provided boundary scan description files, comprising the steps of:

(a) opening a boundary scan description language file pointed to by a user;

(b) extracting a plurality of physical attributes of a target device from said file,

(c) creating a graphical representation based on said plurality of physical attributes found in said file, and

(d) displaying a plurality of said graphical representations on a host computer display.